

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-13. (Canceled).

14. (Currently Amended) An image forming apparatus for forming an image based on input image data, the image forming apparatus comprising:

image storage means for storing the input image data;

display means for displaying an image on a screen so as to prompt a user to input a key a plurality of times ~~when power is on~~;

input means for capturing a key value of an encryption key input by a user during the setting of the encryption key;

key value determining means for determining whether key values input by the user by a predetermined number of times match each other;

non-volatile storage means for storing the key value input as an encryption key if the key value determining means determines that the key values match each other; and

encryption and decryption means for encrypting the image data using an encryption key prior to the storage of the input image data onto image storage means, and for decrypting the encrypted image data subsequent to the reading of the encrypted image data from the image storage means,

wherein the display means displays the key value captured by the input means, and converts an input key value into a form having no specific meaning, and

wherein the display means divides the key value of M digits ~~on an N-digits~~ by N digits basis (M being greater than N, and N not being equal to zero), and converts a part of the key value of the N digits into a form having no specific meaning ~~as soon as~~ after the inputting of the key value of the part of the N digits is completed.

15-16. (Cancelled)

17. (Original) The image forming apparatus according to claim 14, wherein the inputting and displaying of the key value is performed in one of a decimal format and a hexadecimal format.

18. (Canceled).

19. (Currently Amended) A method for inputting the setting of an encryption key for use in the encryption of image data, the encryption key being used to store input image data in image storage means, the method comprising the steps of:

storing the input image data;

displaying an image on a screen so as to prompt a user to input a key a plurality of times ~~when power is on~~;

capturing key values of the encryption key input by a user;

determining whether the key values input by the user by a predetermined number of times match each other;

storing, in non-volatile storage means, the input key value as the encryption key when the key values match each other in the key value determining step; and

encrypting the image data using an encryption key prior to the storing of the input image data, and decrypting the encrypted image data subsequent to the reading of the encrypted image data that has been stored in the storing step,

wherein the displaying step displays the key value captured in the capturing step, converts an already input key value into a form having no specific meaning, and

wherein the displaying step divides the key value of M digits ~~on an N-digits~~ by N digits basis (M being greater than N, and N not being equal to zero), and converts a part of the key value of the N digits into a form having no specific meaning ~~as soon as~~ after the inputting of the key value of the part of the N digits is completed.

20. (Currently Amended) An image forming apparatus for forming an image based on input image data, the image forming apparatus comprising:

an image storage unit configured to store the input image data;

a display unit configured to display an image on a screen so as to prompt a user to input a key a plurality of times ~~when power is on~~;

an input unit configured to capture a key value of an encryption key input by a user during the setting of the encryption key;

a key value determining unit configured to determine whether key values input by the user by a predetermined number of times match each other;

a non-volatile storage unit configured to store the key value input as an encryption key if the key value determining unit determines that the key values match each other; and

an encryption and decryption unit configured to encrypt the image data using an encryption key prior to the storage of the input image data onto image storage means, and configured to decrypt the encrypted image data subsequent to the reading of the encrypted image data from the image storage unit,

wherein the display unit displays the key value captured by the input unit, and converts an input key value into a form having no specific meaning, and

wherein the display unit divides the key value of M digits ~~on an N digits~~ by N digits basis (M being greater than N, and N not being equal to zero), and converts a part of the key value of the N digits into a form having no specific meaning ~~as soon as~~ after the inputting of the key value of the part of the N digits is completed.

21. (Currently Amended) A method for inputting the setting of an encryption key for use in the encryption of image data, the encryption key being used to store input image data in image storage means, the method comprising the steps of:

storing the input image data;

displaying an image on a screen so as to prompt a user to input a key a plurality of times ~~when power is on~~;

capturing key values of the encryption key input by a user;

determining whether the key values input by the user by a predetermined number of times match each other;

storing, in a non-volatile storage unit, the input key value as the encryption key when the key values match each other in the key value determining step; and

encrypting the image data using an encryption key prior to the storing of the input image data, and decrypting the encrypted image data subsequent to the reading of the encrypted image data that has been stored in the storing step,

wherein the displaying step displays the key value captured in the capturing step, converts an already input key value into a form having no specific meaning, and

wherein the displaying step divides the key value of M digits ~~on an N-digits~~ by N digits basis (M being greater than N, and N not being equal to zero), and converts a part of the key value of the N digits into a form having no specific meaning ~~as soon as~~ after the inputting of the key value of the part of the N digits is completed.

22. (Previously Presented) The image forming apparatus according to claim 14, wherein the image storage means corresponds to a hard disk drive (HDD).

23. (Previously Presented) The image forming apparatus according to claim 14, wherein the display means prompts a user to enter a key at an initial setting or when the encryption key is missing.

24. (Previously Presented) The image forming apparatus according to claim 14, wherein one of the key values includes an error detection sign of a predetermined number of bits.

25. (Previously Presented) The image forming apparatus according to claim 14, wherein the image forming apparatus includes a copy mode, a print mode, and a facsimile mode, and wherein an encryption key is set for each of a copy mode, the print mode, and the facsimile mode.

26. (Previously Presented) The method according to claim 19, wherein the storing step stores the input image data in a hard disk drive (HDD).

27. (Previously Presented) The method according to claim 19, wherein the displaying step comprises prompting a user to enter a key at an initial setting or when the encryption key is missing.

28. (Previously Presented) The method according to claim 19, wherein one of the key values includes an error detection sign of a predetermined number of bits.

29. (Previously Presented) The method according to claim 19, wherein the non-volatile storage means is a component of an image forming apparatus that includes a copy mode, a print mode, and a facsimile mode, and wherein an encryption key is set for each of a copy mode, the print mode, and the facsimile mode.

30. (Previously Presented) The image forming apparatus according to claim 20, wherein the image storage unit corresponds to a hard disk drive (HDD).

31. (Previously Presented) The image forming apparatus according to claim 20, wherein the display unit prompts a user to enter a key at an initial setting or when the encryption key is missing.

32. (Previously Presented) The image forming apparatus according to claim 20, wherein one of the key values includes an error detection sign of a predetermined number of bits.

33. (Previously Presented) The image forming apparatus according to claim 20, wherein the image forming apparatus includes a copy mode, a print mode, and a facsimile mode, and wherein an encryption key is set for each of a copy mode, the print mode, and the facsimile mode.

34. (Previously Presented) The method according to claim 21, wherein the storing step stores the input image data in a hard disk drive (HDD).

35. (Previously Presented) The method according to claim 21, wherein the displaying step comprises prompting a user to enter a key at an initial setting or when the encryption key is missing.

36. (Previously Presented) The method according to claim 21, wherein one of the key values includes an error detection sign of a predetermined number of bits.

37. (Previously Presented) The method according to claim 21, wherein the non-volatile storage unit is a component of an image forming apparatus that includes a copy mode, a print mode, and a facsimile mode, and wherein an encryption key is set for each of a copy mode, the print mode, and the facsimile mode.